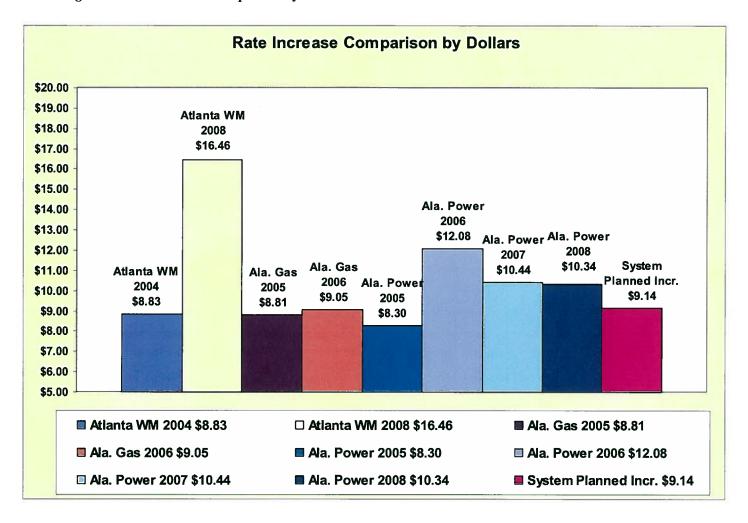
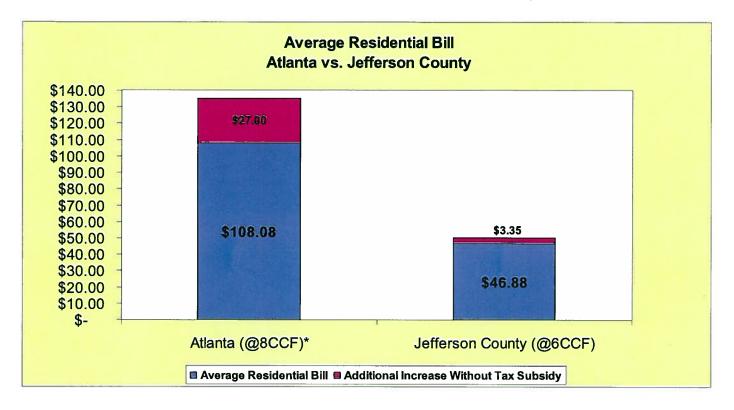
Figure 10 - Rate Increase Comparison by Dollars



This information regarding other utilities' rate increases in recent years confirms that the impact of the planned 25% revenue increase on the average residential bill is not so large as to cause significant rate shock. This rate increase will obviously have an impact on System ratepayers but is ultimately necessary to begin the process of addressing the System's debt problems and capital needs.

While direct comparisons between different utility rates are problematic due to the number of different factors that must be considered to reach an apples to apples comparison, including operating costs, capital requirements, and other socio-economic factors, the Receiver has conducted a comparison between System rates and the wastewater rates charged by the Atlanta Department of Watershed Management. Both Atlanta and the System are wastewater systems serving major cities in the southeast, and both systems are currently under EPA consent decrees. Both systems are also subsidized by additional sources of tax revenue in addition to revenue from user fees. As shown in the graph below, the average residential bill in Atlanta is substantially higher than the average residential bill for the System following the Receiver's 25% revenue increase, and the discrepancy becomes even greater once you consider the subsidies in each System.

Figure 11 - Comparison of Average Residential Bill in Atlanta and Jefferson County



D. The 25% Revenue Increase Meets the Legal Requirement of Reasonableness and is Within the Range of Acceptable Financial Impact Analysis.

1. The Interim Rate Increase is Reasonable Under Alabama Law.

Any increase in rates must comply with legal standards of reasonableness. Amendment 73 to the Alabama Constitution requires that the rules and regulations fixing rates and charges of the sewer System must be reasonable and non-discriminatory. Alabama case law is primarily concerned with uniformity and the absence of discrimination between rate classes. Cost of service is a very important factor, and most reported rate challenges have involved instances where the rate was actually generating a surplus for the utility. See, e.g., Marshall Durbin & Co. of Jasper, Inc. v. Jasper Util. Bd. of City of Jasper, 437 So. 2d 1014 (Ala. 1983), overruled on other grounds, Ex parte Water Jet Sys., Inc., 758 So. 2d 505 (Ala. 1999). Rates high enough to generate a surplus are not per se unreasonable or confiscatory. See, e.g., Campbell v. Water Works & Sanitary Sewer Bd. of City of Montgomery, 115 So. 2d 519 (Ala. 1959).

The Receiver Order confirmed that the sewer debt, and its corresponding service requirement, is an obligation of the System. It is undisputed that the System is not currently generating a surplus. The interim rate increase the Receiver intends to implement will not generate revenues high enough to earn a surplus (or even satisfy all of the System's current

operational and debt service needs), as the numerous studies discussed in this report, including the B&V reports, establish.

No reported Alabama cases have directly addressed the concept of financial impact in considering the reasonableness of utility rates. Nevertheless, the impact of the rate increase on consumers has been considered by the Receiver. The initial rate increase is designed to be substantial enough to allow the System to make significant progress towards eliminating the substantial funding deficit, but not so large as to cause rate shock or further destabilize the System revenues. The Receiver intends to monitor the impact of this first interim rate increase on System revenues, both positive and negative, and take that impact into consideration in determining the level of future rate increases.

2. According to the EPA Financial Impact Guidelines, the Rate Increase Will Not Have a High Financial Impact on Residential Customers.

Although not a test of reasonableness or required by Alabama law, the EPA has addressed the issue of financial impact standards in a narrow context. With regard to sewer rates, the EPA developed guidelines to assess financial capability for consideration in Combined Sewer Overflow ("CSO")¹⁹⁶ consent decrees designed to settle litigation brought against wastewater providers for violations of the CWA (the "Financial Capability Guidelines").¹⁹⁷ The Financial Capability Guidelines were designed in part to "allow a phased approach to implementation of CSO controls considering a county's financial capability."¹⁹⁸ The Financial Capability Guidelines assign a value (the "Residential Indicator") to the ratio of the expected average sewer bill to median household income; a Residential Indicator that is greater than two percent of median household income ("MHI") is considered to have "high" financial impact on a residential ratepayer.¹⁹⁹

The Financial Capability Guidelines were designed to serve as a forward-looking tool used to estimate and evaluate the financial resources a wastewater provider is expected to have available in order to implement CSO controls and to assist in the development of CSO control implementation schedules. For example, a high residential indicator might be used by a wastewater operator in violation of the CWA to persuade the EPA to allow for more time to completely fix the overflow problem. However, even if a planned program results in a high burden under the Financial Capability Guidelines, the utility can still be required to implement the program based on the totality of the circumstances. Financial Capability Guidelines were not designed to assess the financial impact of costs a wastewater provider has already incurred.

Even so, the Receiver's planned interim rate increase will not have a "high" financial impact on residential ratepayers according to the Financial Capability Guidelines. The Receiver

¹⁹⁶ A CSO is a sewer overflow that occurs in a combined system that collects both storm water and wastewater.

¹⁹⁷ EPA, Combined Sewer Overflows – Guidance for Financial Capability Assessment and Schedule Development, February 1997, EPA-832-B-97-004, available at http://www.epa.gov/npdes/pubs/csofc.pdf (last visited June 6, 2011).

¹⁹⁸ *Id*.

¹⁹⁹ Similarly, a Residential Indicator of 1.0% to 2.0% is considered to have a "mid-range" financial impact under the Financial Capability Guidelines, and a Residential Indicator less than 1.0% is considered to have a low impact.

retained Industrial Economics, Incorporated ("IEI") to evaluate the potential economic impact of the interim rate increase described herein under the Financial Capability Guidelines. IEI is a private consulting firm that provides economic and regulatory analysis. The Receiver retained IEI because EPA has frequently used IEI to provide financial impact analysis in consent decree proceedings. IEI's report "Financial Impact of Proposed Rate Increase on Residential Customers of Jefferson County Environmental Services Department," is included in the Appendix at A-21.

IEI performed a detailed demographic analysis of the System's service area, analyzing the number of households served, a breakdown of households by structure type, and median household income within the System service area, weighted by the households in each jurisdiction served.

After finding that the estimated median household income in the System service area is \$46,593, IEI concluded that the current Residential Indicator in the System service area is "low," based off of an estimated average annual sewer cost per household of \$426.²⁰⁰ To determine the impact of the Receiver's planned interim rate increase, IEI performed three separate analyses: (1) short run; and (2) long run; and (3) cost of service allocation.

The short run analysis is based on the fact that in the coming five years, ESD projects that its capital program will be funded through reserve funds currently on hand, and not through operating funds or additional borrowing. The long run analysis assumes that once those reserve funds are depleted, ESD will fund its capital program through ongoing revenues, which will leave less money to cover debt service costs.²⁰¹ The results of the short run and long run analyses were identical: under either scenario, the Residential Indicator will be 1.1%, in the low end of the "mid" impact range, based on an estimated average annual sewer cost per household of \$534.²⁰² The impact is identical under either scenario because, although the amount of funds available to pay debt service costs is different depending on whether the capital program is funded through reserves or operating revenues, the total funds available to cover non-debt costs of operating and maintaining the system are the same. Both the short run and long run analyses calculate the financial impact of the rate increase based on the current 55% of total System costs that are allocated to and paid by the residential customers.

The third analysis IEI performed gauged the impact of the rate increase assuming a cost of service allocation was in place. Cost of service occurs when each rate class is allocated the full percentage of costs that the System incurs to serve that particular rate class. If the residential class within the System were allocated its cost of service, the allocation would increase from the current 55% to 66%. The results of this hypothetical cost of service analysis would eventually increase the average annual sewer cost per household to \$641, which results in a Residential Indicator of 1.37%, which still is in the "mid" range according to the Financial Capability Guidelines.²⁰³

²⁰⁰ IEI Report at Exh. 7.

As discussed in Section III.B *supra*, the Indenture prohibits the use of System revenues for capital expenditures unless all debt costs are paid in full.

²⁰² IEI Report at Exh. 8.

²⁰³ IEI Report at Exh. 9.

IEI also noted that, even with the interim rate increase, the System still has an average wastewater bill that is significantly less than the average bill in Atlanta and that several communities, like Jefferson County, are likely to face double-digit rate increases as they update their infrastructure and comply with Consent Decrees. The results of the IEI analysis – that the Receiver's planned interim rate increase falls within the "mid" impact range under the EPA Financial Capability Guidelines under current allocations, and would remain in the "mid" impact range assuming a cost of service allocation, provide additional support that the Receiver's planned 25% revenue increase is an appropriate first step in bringing System revenues to sufficient levels.

E. Based on the Citi Models, the 25% Revenue Increase is Compatible With a Variety of Possible Solutions.

The models Citi prepared at the Receiver's request for negotiation purposes provide an additional indicator that the Receiver's 25% revenue increase is appropriate.²⁰⁴

Citi took the O&M and capital improvement plans and the projected System revenues provided by the Receiver and calculated the total revenue increases that would be required to meet debt levels ranging from approximately \$1.4 billion to the full outstanding balance of approximately \$3.158 billion, assuming those amounts were refinanced at estimated future market conditions. This range was intended to represent the range of possible debt levels that the independent public corporation would need to refinance following negotiated concessions by the various creditors groups.

The results of the Citi models indicate that for any negotiated solution with a debt level between approximately \$1.4 billion and approximately \$2.5 billion (Scenarios 2 through 8), the required first year revenue increase would be within the range of a 20% to 28% total increase in revenues.

²⁰⁴ The Citi models are discussed in more detail in Section III.C supra.

Table 7 - Citi Scenario Results

Scenario	Revenue Increases ²⁰⁵			Par Value of New Debt ²⁰⁶	Available Net	Redemption	Funding
	2012	2013	2014		Proceeds ²⁰⁷	Cost ²⁰⁸	Funding Gap ²⁰⁹
1	3.0%	3.0%	3.0%	1,578,420	1,370,160	3,158,299	(1,788,138)
2	20.0%	3.0%	3.0%	1,600,144	1,406,132	3,158,299	(1,752,166)
3	20.0%	3.0%	3.0%	1,800,301	1,575,536	3,158,299	(1,582,763)
4	20.0%	3.6%	3.6%	2,001,836	1,747,501	3,158,299	(1,410,797)
5	20.0%	10.0%	10.0%	2,200,441	1,940,201	3,158,299	(1,218,098)
6	20.0%	18.7%	18.7%	2,401,043	2,137,513	3,158,299	(1,020,785)
7	23.7%	23.7%	23.7%	2,602,891	2,328,859	3,158,299	(829,440)
8	28.0%	28.0%	28.0%	2,801,430	2,514,686	3,158,299	(643,613)
9	32.2%	32.3%	32.3%	3,001,714	2,700,240	3,158,299	(458,058)
10	36.0%	36.3%	36.3%	3,201,036	2,884,126	3,158,299	(274,172)
11	42.1%	42.1%	42.1%	3,499,031	3,158,326	3,158,299	28

This demonstrates that the Receiver's planned 25% revenue increase is compatible with a wide range of potential negotiated debt levels, and provides additional support that the planned interim increase is appropriate.

VI. Description of the New Rates: The B&V Sewer Cost Allocation and Rate Study.

The 25% revenue increase will be implemented through a new rate design. The Receiver retained B&V to perform a sewer cost allocation and rate study (the "B&V Cost Allocation

²⁰⁵ All scenarios assume 3.0% rate increases annually from 2015 onwards for the full term of any newly-issued bonds.

²⁰⁶ All dollar figures in 1,000s. The Par Value of New Debt represents the amount of new debt that will yield the Available Net Proceeds.

²⁰⁷ The difference between the Par Value of New Debt and the Available Net Proceeds represent total issuance costs for each scenario.

²⁰⁸ Redemption Cost is the total amount of debt currently outstanding.

The Funding Gap is the difference between the amount of debt currently outstanding and the Available Net Proceeds resulting from the refinancing under each scenario. The Funding Gap represents the total amount of creditor concessions for each scenario, assuming that the County pays the issuance costs.

Study"). A copy of the report summarizing the results of the B&V Cost Allocation Study is included in the Appendix at A-22.

The B&V Cost Allocation Study first compares the System's total cost of providing service with the projected revenue generated under existing rates, and confirms the analysis previously discussed demonstrating that, due to declining customer accounts and usage, the total System revenues will decline over the next four years by approximately 6.45%, from approximately \$155 million in 2011 to approximately \$145 million by 2016, while the System's total revenue requirement is projected to increase from approximately \$211 million in 2012 to approximately \$406 million by 2016. In order to meet the current System revenue requirements, at the current outstanding debt level of approximately \$3.158 billion, assuming the debt could be refinanced, revenues would need to be increased by approximately 50% in 2012, 43% in 2013, and 43% in 2014 in the first three years alone. This confirms the overwhelming evidence that current System revenues are insufficient to meet the System's obligations.

The B&V Cost Allocation Study also performed a cost of service analysis and recommended a new rate design to implement the Receiver's planned 25% interim revenue increase. The B&V Cost Allocation Study confirmed that the System's rates need a design that better captures the costs of servicing the different classes of System customers and provides the System with a more predictable revenue stream. The design changes described below are a significant step in the right direction.

A. Existing Rate Structure.

The System currently charges customers a small fixed monthly fee or a varying charge calculated from the customer's monthly volumetric water usage. The fixed charge is a minimum charge only applied to customers with no billable volume or such a low volume that their bill would be less than the minimum charge. Billed sewer volume for residential customers is calculated using 85% of their metered water usage; non-residential customers are billed using 100% of their metered water usage. The current rates charged by the System are listed below:

Table 8 - Existing Monthly Minimum Charges

Water Meter Size	Existing Charge
5/8"	\$2.00
3/4"	\$2.50
1"	\$5.00
1.5"	\$9.00
2"	\$14.00
3"	\$28.00
4"	\$45.00
6"	\$85.00
8"	\$200.00
10"	\$250.00

²¹⁰ B&V Cost Allocation Study at Table 2-4 and 4-1.

Table 9 - Existing Volumetric Charges (\$/Ccf)

Residential	\$7.40
Non-residential	\$7.40

Table 10 - Existing Miscellaneous Charges (\$/1,000 gal.)

Grease Charges	\$30.00
Septage Charges	\$30.00

Table 11 - Existing Extra Strength Charges

	Tier 1		Tier 2	
Component	\$/lb	mg/l	\$/lb	mg/l
Total Suspended Solids	\$0.1950	300-1000	\$0.2925	1001+
Biochemical Oxygen Demand	\$0.1500	300-1200	\$0.3000	1201+
Chemical Oxygen Demand	\$0.1950	750-3000	\$0.2925	3001+
Fats, Oils & Grease	\$0.1000		•	•
Total Phosphorus	\$2.000			

The System needs a more reliable monthly revenue stream to mitigate the unpredictable variances resulting from changes in water usage patterns. The easiest way to do this is to institute a fixed monthly service charge that System customers pay each month. This is consistent with the practices similar utilities employ (as an example, BWWB charges its customers with the standard 5/8 inch meter a \$15.21 monthly fee).

The System's annual revenue requirements are its costs of service. The total cost of service is broken down into functional cost components, then allocated to cost categories, and then distributed amongst the various customer classes.